R·I·T

Title: Cee Manual Developer

Semiconductor & Microsystems
Fabrication Laboratory **Revision: C** **Rev Date: 05/11/2020**

Approved by:

_____ / / _____ / /
Process Engineer Equipment Engineer

1 SAFETY PRECAUTIONS

1.1 Hazards to the Operator

1.1.1 **Chemical Hazzard** - Read the materials safety data sheets for the materials that will be used. Make sure that the lid is closed before spinning a wafer and avoid contact with developer. Immediately rinse any developer from skin and seek assistance if you contact any developer.

1.1.3 **Spinning Wafers** - Wear safety glasses at all times.

1.2 Hazards to the Tool

1.2.1 **Allen Screw** - When changing the chuck between 4 and 6 inch, there is a special screw that must be removed from the chuck with an Allen wrench. The screw has a vacuum port in it and if lost, must be replaced with the same type.

1.2.2 **Spray Settings** - Do not adjust the settings for the Developer or DI water rinse.

1.2.3 **Correct Chemistry** - Only CD-26 Developer may be used in this system. Please contact a staff member to refill.

1.2.4 **Excessive Spin Speed** - Do not use excessive spin speeds or wafer may break. Avoid spinning above 3000rpm.

2 INSTRUCTIONS

2.1 Service Chase Set Up

2.1.1 In service chase 2735, on the South Nitrogen Manifold 2375, verify **CEE-100 DEV. SPINNER N2** valve is ON.

2.2 Program Numbers

2.2.1 There are 10 program spots (# 0-9)

2.2.2 **Program #0** is reserved for the standard 4 inch wafer program.

2.2.3 **Program #1** is reserved for the standard 6 inch wafer program.

2.2.4 **Program #9** is open for general use and may be changed by anyone.

2.2.5 **Programs #2-8** may be signed out. These will be purged quarterly.

2.3 Running a Program

2.3.1 If the system has not been used for a while, run a blank wafer to purge out bubbles.

2.3.2 Load the wafer.

2.3.3 Press **Run**, put in the **recipe number** and press **Enter**. Close the lid and press **Start**. The system will do a centering check. Re-center the wafer if needed. Press **Start** again to run the program.
2.3.4 When the program is complete, press **Reset** to stop the alarm.
2.3.5 If the system runs low on developer, an alarm will sound. Call a technician to refill.

2.4 Entering a Program

2.4.1 Programs start with step **0** and go up to **9**.
2.4.2 Press **Program**. Display will prompt **PROG MODE/PROG#**. Enter your program number and press **Enter**.
2.4.3 Display will prompt **DISPENSE 1=ON 0=OFF**. Select **1** and press **Enter**.
2.4.4 Display will prompt **PG/# VEL/0**. Enter a spin speed for **Step 1** and press **Enter**. To write over another spin speed, press **Clear**, enter the new spin speed and press **Enter**.
2.4.5 Display will prompt **PG/# RMP/0**. Enter a ramp rate and press **Enter**. (0-30,000)
2.4.6 Display will prompt **PG/# STEP-0 NOZZLE #1**. Select a nozzle and press **Enter**.
2.4.6.1 No Dispense **=0**
2.4.6.2 Developer Dispense **=1**
2.4.6.3 DI Rinse Dispense **=2**
2.4.7 Display will prompt **PG/# TIME/0**. Enter a time and press **Enter**.
2.4.8 The program will advance to the next step. Display will prompt **PG/# VEL/1**. Enter a velocity for **Step 2** and press **Enter**. To end the program, press **Clear** and **Enter**.
2.4.9 Excessive spin speeds may cause wafer breakage. Do not spin above 3000rpm.

2.5 Stopping a Run

2.5.1 Press **Stop**.

2.6 Resetting the System

2.6.1 Press the **Reset** button.

2.7 Changing the Chuck

2.7.1 Use the Allen wrench to remove the screw. The screw has a vacuum port in it and if lost, must be replaced with the same type.
2.7.2 When finished be careful to properly orient the chuck and replace the Allen screw.

Summary of Changes	Originator	Rev/Date
Original Issue	Dave Yackoff	A-01/24/2006
Updated section 2.1 – N2 Valve is now always ON	Peter Morici	B-05/12/2017
Updated format and hazzards	Meller/O'Brien	C-5/11/2020